



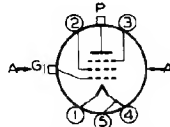
959

**DETECTOR AMPLIFIER PENTODE**

ACORN TYPE

959

Filament	Coated	
Voltage	1.25	d-c volts
Current	0.05	amp.
Direct Interelectrode Capacitances:		
Grid to Plate <sup>o</sup>	0.015 max.	μμf
Input	1.8	μμf
Output	2.5	μμf
Overall Length		1-11/16" ± 3/16"
Overall Diameter		1-3/32" ± 1/16"
Bulb		T-4½
End Terminals	See Outline in GENERAL SECTION	Two
Base		Small Radial 5-Pin
Pin 1-Filament		P - Plate
Pin 2-Grid No.2		G <sub>1</sub> - Grid No.1
Pin 3-Grid No.3		AA' - Plane of
Pin 4-Filament -		Electrodes
Pin 5-Filament -		
RCA Socket		Stock No. 9925
RCA Grid & Plate Clips		Stock No. 9939
Mounting Position		Vertical <sup>o</sup>



P is on Long Part of Bulb: Top  
G<sub>1</sub> is on Short Part of Bulb: Bottom  
BOTTOM VIEW (5BE)

Maximum Ratings are Design-Center Values

AMPLIFIER

D-C Plate Voltage	145 max.	volts
D-C Screen (Grid No.2) Voltage	67.5 max.	volts
Characteristics — Class A <sub>1</sub> Amplifier:		
D-C Plate Voltage	135	volts
Suppressor (Grid No.3) Connected to filament(-) at socket		
D-C Screen Voltage	67.5	volts
D-C Grid (No.1) Voltage #	-3	volts
Plate Resistance	0.8 approx.	megohm
Transconductance	600	μmhos
D-C Plate Current	1.7	ma.
D-C Screen Current	0.4	ma.

<sup>o</sup> with shield baffle.

◊ Horizontal operation permitted if plane of electrodes is vertical (plate on edge).

# Under maximum rated conditions, the resistance in the grid circuit should not exceed 0.1 megohm with fixed bias, or 0.5 megohm with cathode bias.

**R-f grounding** by means of condensers placed close to the tube terminals is required if the full capabilities of the 959 for ultra-high-frequency uses are to be obtained. It is important in the cases of the plate and control-grid circuits that separate r-f grounding returns be made to a common point in order to avoid r-f inter-action through common return circuits. It may also be advisable in some applications to supplement the action of the by-pass condensers by r-f chokes placed close to the condensers in the return or supply lead for the grid, the screen, the suppressor, the plate, and the filament.

←Indicates a change.

JUNE 30, 1944

RCA VICTOR DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

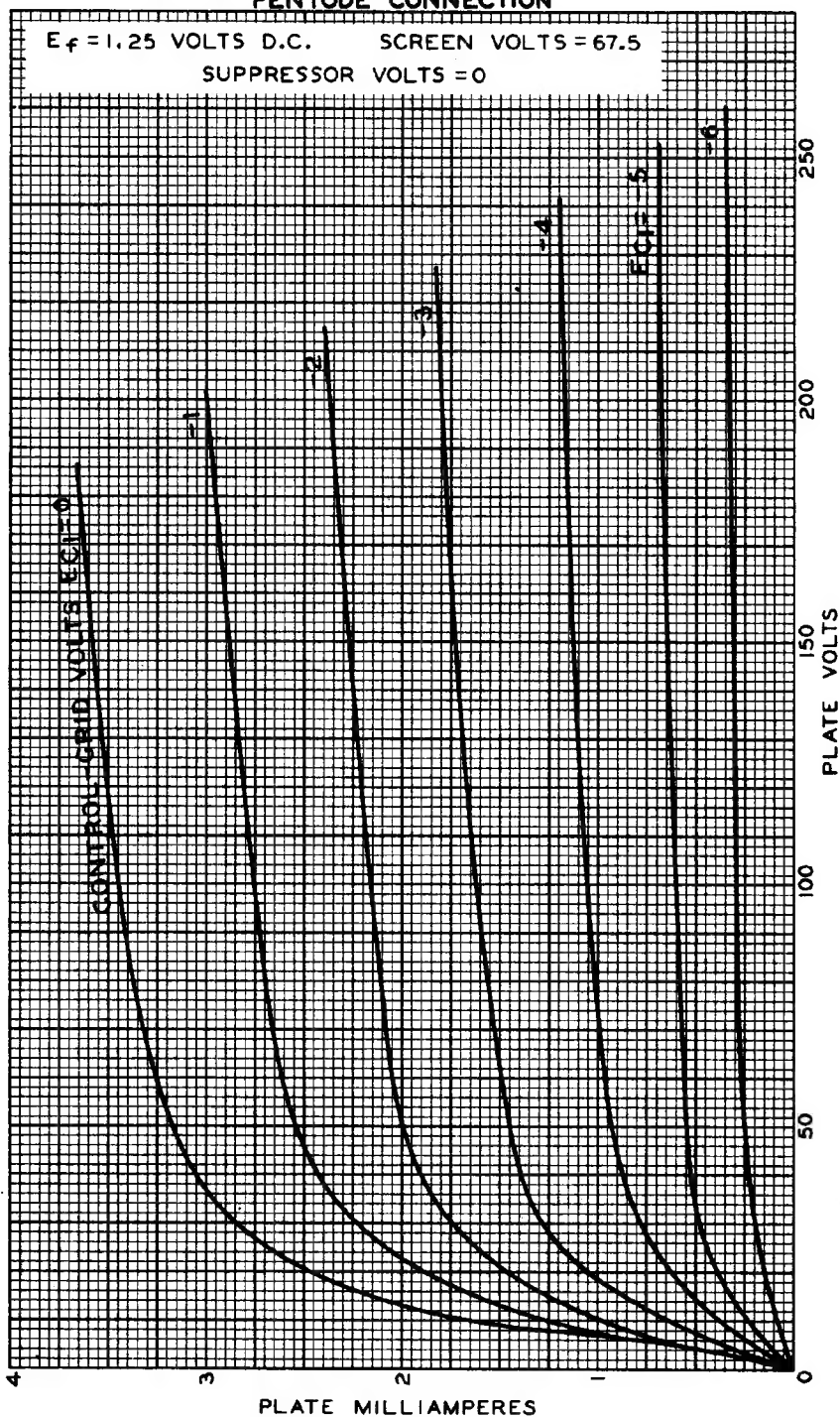
DATA

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# AVERAGE PLATE CHARACTERISTICS PENTODE CONNECTION



JUNE 14, 1944

RCA VICTOR DIVISION  
RADIO CORPORATION OF AMERICA, HARRISON, NEW JERSEY

92CM-6338R1